

Little Rock School District: Arkansas' Energy Education Pioneers

EnergySmart School Close-Ups highlight schools and school districts that have found ways to use energy more wisely, lowering their energy bills and raising awareness of energy issues.

- ☐ Improving Existing Buildings
- ☐ Financing Building Improvements
- ☐ Operating and Maintaining Buildings
- ☐ Designing New Buildings
- ☒ Teaching and Learning
- ☐ Using Renewable Energy Technologies
- ☐ Using Alternately Fueled School Buses



The Little Rock School District is the largest district in Arkansas, with 25,000 students. Established in 1853 with one school, the district has grown to 50 schools. Its ninth-grade science curriculum—known as “Active Physics”—now incorporates a six-week component on energy, giving 1,500 students hands-on applications of complex principles.



Little Rock's Central High School

Piloting energy learning programs

The district's adoption of energy-related curricula began during the 1997-98 school year with a volunteer after-school project at one of its high schools, Central High. Under the leadership of biology teacher Annice Steadman, 16 Central High students and five students from the engineering department at the University of Arkansas at Little Rock employed the energy education program, Savings Through Energy Management (STEM). Hands-on learning activities included assessment of the school's buildings and identification of energy savings opportunities. Ultimately, the team presented their findings to the local school board and the city's board of directors, engaging them in the concept of hands-on learning through energy curricula.



A Campaign of Rebuild America
U.S. Department of Energy



PROFILE:

Location:
Little Rock, Arkansas

District size:
25,000 students

Energy project scope:
Energy education
programs including
energy auditing and
assessment

Date completed:
Ongoing since 1997

Project support:
U.S. Department of
Energy, Arkansas
Department of
Economic Develop-
ment, American
Association of Physics
Teachers, American
Institute of Physics

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Adopting energy-related curricula

In the meantime, the district made two important decisions: it would relocate ninth-grade students from junior high facilities into high schools, and would establish a freshman physics curriculum. The curriculum it adopted was "Active Physics," developed in association with the American Association of Physics Teachers and the American Institute of Physics. Active Physics is published by It's About Time, Inc., which provides the curriculum, training, and a source for laboratory supplies. The program's underlying principal is that students best understand physics when their learning incorporates "real world" applications and is related to other disciplines. Throughout a year, Little Rock students explore units on home, transportation, communications, medicine, predictions, and sports, and—because of help from Rebuild America and the success of Central High's pilot program—energy.



Central High School student participates in the Active Physics Program

Rebuild America support

Rebuild Arkansas, led by the Arkansas Department of Economic Development, researched curricula options and recommended the U.S. Department of Energy's "Lighting in the Library" as the core energy component. Students not only study energy in the classroom but conduct lighting audits in their schools and assess energy use building-wide. Rebuild America and Rebuild Arkansas have supported the teachers throughout the school year to monitor progress, troubleshoot, and ensure the program is a success.

Finally, at the end of the school year, the students report their findings to peers, school decision-makers, and parents. Their recommendations may translate into actions that save their schools many thousands of dollars.



The EnergySmart Schools campaign is operated by Rebuild America, through the U.S. Department of Energy's Office of Building Technology, State and Community Programs.



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Renewable Energy Clearinghouse (EREC)
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